

## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

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Application Serial Number: 09/517,466C  
Source: 1600  
Date Processed by STIC: 4/18/2002

MAY 01 2002

TECH CENTER 1600/2900

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:  
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202  
Or  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

**Raw Sequence Listing Error Summary**

<b>ERROR DETECTED</b>	<b>SUGGESTED CORRECTION</b>	<b>SERIAL NUMBER:</b> <u>09/517,466C</u>
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**ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE**

- 1 Wrapped Nucleic  
Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino  
Numbering The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 ✓ Variable Length Sequence(s) IS-? contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0  
"bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s)       . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences  
(OLD RULES) Sequence(s)        missing. If intentional, please insert the following lines for each skipped sequence:  
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
This sequence is intentionally skipped  
  
Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences  
(NEW RULES) Sequence(s)        missing. If intentional, please insert the following lines for each skipped sequence.  
<210> sequence id number  
<400> sequence id number  
000
- 9 Use of n's or Xaa's  
(NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.  
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa; and which residue n or Xaa represents.
- 10 Invalid <213>  
Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220> Sequence(s)        missing the <220> "Feature" and associated numeric identifiers and responses.  
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0  
"bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

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1634

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/517,466C

DATE: 04/24/2002  
TIME: 07:44:39

Input Set : A:\09424680003seqlist ascii  
Output Set: N:\CRF3\04242002\I517466C.raw

Does Not Comply  
Corrected Diskette Needed

5 <110> APPLICANT: Hartley, James L.  
7 Brasch, Michael A.  
9 Temple, Gary F.  
11 Cheo, David  
15 <120> TITLE OF INVENTION: Compositions and Methods for Use in Recombinational  
16 Cloning of Nucleic Acids  
20 <130> FILE REFERENCE: 0942.4680003  
24 <140> CURRENT APPLICATION NUMBER: 09/517,466C  
26 <141> CURRENT FILING DATE: 2000-03-02  
30 <150> PRIOR APPLICATION NUMBER: US 60/122,389  
32 <151> PRIOR FILING DATE: 1999-03-02  
36 <150> PRIOR APPLICATION NUMBER: US 60/126,049  
38 <151> PRIOR FILING DATE: 1999-03-23  
42 <150> PRIOR APPLICATION NUMBER: US 60/136,744  
44 <151> PRIOR FILING DATE: 1999-05-28  
48 <160> NUMBER OF SEQ ID NOS: 285  
52 <170> SOFTWARE: PatentIn version 3.1  
56 <210> SEQ ID NO: 1  
58 <211> LENGTH: 25  
60 <212> TYPE: DNA  
62 <213> ORGANISM: Artificial Sequence  
66 <220> FEATURE:  
68 <223> OTHER INFORMATION: attB1 site  
70 <400> SEQUENCE: 1  
71 acaagtttgt acaaaaaaagc aggct 25  
74 <210> SEQ ID NO: 2  
76 <211> LENGTH: 25  
78 <212> TYPE: DNA  
80 <213> ORGANISM: Artificial Sequence  
84 <220> FEATURE:  
86 <223> OTHER INFORMATION: attB2 site  
88 <400> SEQUENCE: 2  
89 acccagctt cttgtacaaa gtgggt 25  
92 <210> SEQ ID NO: 3  
94 <211> LENGTH: 233  
96 <212> TYPE: DNA  
98 <213> ORGANISM: Artificial Sequence  
102 <220> FEATURE:  
104 <223> OTHER INFORMATION: attP1 site  
106 <400> SEQUENCE: 3  
107 tacaggtcac taataccatc taagtagttg attcatagtg actggatatg ttgtgtttta 60  
109 cagtattatg tagtctgttt tttatgcaaa atctaattta atatattgtat atttatatca 120  
111 ttttacgttt ctcgttcagc tttttgtac aaagttggca ttataaaaaa gcattgctca 180

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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/517,466C

DATE: 04/24/2002  
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Input Set : A:\09424680003seqlist ascii  
Output Set: N:\CRF3\04242002\I517466C.raw

113	tcaatttgtt gcaacgaaca ggtcactatc agtcaaaata aaatcattat ttg	233
116	<210> SEQ ID NO: 4	
118	<211> LENGTH: 233	
120	<212> TYPE: DNA	
122	<213> ORGANISM: Artificial Sequence	
126	<220> FEATURE:	
128	<223> OTHER INFORMATION: attP2	
130	<400> SEQUENCE: 4	
131	caaataatga ttttattttg actgatagtg acctgttcgt tgcaacaaat tgataagcaa	60
133	tgctttctta taatgccaac tttgtacaag aaagctgaac gagaaacgta aaatgatata	120
135	aatatcaata tattaaatta gattttgcat aaaaaacaga ctacataata ctgtaaaaca	180
137	caacatatcc agtcaactatg aatcaactac ttagatggta tttagtggac gta	233
140	<210> SEQ ID NO: 5	
142	<211> LENGTH: 125	
144	<212> TYPE: DNA	
146	<213> ORGANISM: Artificial Sequence	
150	<220> FEATURE:	
152	<223> OTHER INFORMATION: attL1	
154	<400> SEQUENCE: 5	
155	acaagtttgt acaaaaaaagc tgaacgagaa acgtaaaatg atataaataat caatataatta	60
157	aatttagattt tgcataaaaa acagactaca taatactgta aaacacaaca tatccagtc	120
159	ctatg	125
162	<210> SEQ ID NO: 6	
164	<211> LENGTH: 135	
166	<212> TYPE: DNA	
168	<213> ORGANISM: Artificial Sequence	
172	<220> FEATURE:	
174	<223> OTHER INFORMATION: attL2	
176	<400> SEQUENCE: 6	
177	gcaggtcgac catagtgact ggatatgttg tgtttacag tattatgtag tctgttttt	60
179	atgcaaaatc taatttaata tattgatatt tatacattt tacgtttctc gttcagctt	120
181	cttgtacaaa gtgg	135
184	<210> SEQ ID NO: 7	
186	<211> LENGTH: 100	
188	<212> TYPE: DNA	
190	<213> ORGANISM: Artificial Sequence	
194	<220> FEATURE:	
196	<223> OTHER INFORMATION: attR1	
198	<400> SEQUENCE: 7	
199	caaataatga ttttattttg actgatagtg acctgttcgt tgcaacaaat tgataagcaa	60
201	tgcttttta taatgccaac tttgtacaaa aaagcaggct	100
204	<210> SEQ ID NO: 8	
206	<211> LENGTH: 100	
208	<212> TYPE: DNA	
210	<213> ORGANISM: Artificial Sequence	
214	<220> FEATURE:	
216	<223> OTHER INFORMATION: attR2	
218	<400> SEQUENCE: 8	
219	caaataatga ttttattttg actgatagtg acctgttcgt tgcaacaaat tgataagcaa	60

RAW SEQUENCE LISTING DATE: 04/24/2002  
 PATENT APPLICATION: US/09/517,466C TIME: 07:44:39

Input Set : A:\09424680003seqlist ascii  
 Output Set: N:\CRF3\04242002\I517466C.raw

```

221 tgctttctta taatgccaac tttgtacaag aaagctgggt          100
224 <210> SEQ ID NO: 9
226 <211> LENGTH: 15
228 <212> TYPE: DNA
230 <213> ORGANISM: Artificial Sequence
234 <220> FEATURE:
236 <223> OTHER INFORMATION: 15 bp core region of attB, attP, attL and attR
238 <400> SEQUENCE: 9
239 gctttttat actaa                                     15
242 <210> SEQ ID NO: 10
244 <211> LENGTH: 30
246 <212> TYPE: DNA
248 <213> ORGANISM: Artificial Sequence
252 <220> FEATURE:
254 <223> OTHER INFORMATION: attL5
256 <400> SEQUENCE: 10
257 agcctgctt attatactaa gttggcatta                      30
260 <210> SEQ ID NO: 11
262 <211> LENGTH: 30
264 <212> TYPE: DNA
266 <213> ORGANISM: Artificial Sequence
270 <220> FEATURE:
272 <223> OTHER INFORMATION: attL6
274 <400> SEQUENCE: 11
275 agcctgctt tttatattaa gttggcatta                      30
278 <210> SEQ ID NO: 12
280 <211> LENGTH: 28
282 <212> TYPE: DNA
284 <213> ORGANISM: Artificial Sequence
288 <220> FEATURE:
290 <223> OTHER INFORMATION: attB1.6
292 <400> SEQUENCE: 12
293 ggggacaact ttgtacaaaa aagttggc                      28
296 <210> SEQ ID NO: 13
298 <211> LENGTH: 29
300 <212> TYPE: DNA
302 <213> ORGANISM: Artificial Sequence
306 <220> FEATURE:
308 <223> OTHER INFORMATION: attB2.2
310 <400> SEQUENCE: 13
311 ggggacaact ttgtacaaga aagctgggt                     29
314 <210> SEQ ID NO: 14
316 <211> LENGTH: 29
318 <212> TYPE: DNA
320 <213> ORGANISM: Artificial Sequence
324 <220> FEATURE:
326 <223> OTHER INFORMATION: attB2.10
328 <400> SEQUENCE: 14
329 ggggacaact ttgtacaaga aagttgggt                     29

```

## RAW SEQUENCE LISTING

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DATE: 04/24/2002

TIME: 07:44:39

Input Set : A:\09424680003seqlist ascii  
Output Set: N:\CRF3\04242002\T517466C.raw

332 <210> SEQ ID NO: 15  
334 <211> LENGTH: 25  
336 <212> TYPE: DNA  
338 <213> ORGANISM: Artificial Sequence  
342 <220> FEATURE:  
344 <223> OTHER INFORMATION: attB2(-1) Oligonucleotide Primer  
346 <220> FEATURE:  
348 <221> NAME/KEY: misc\_feature  
350 <222> LOCATION: (25)..(25) *n can only represent a single nucleotide*  
352 <223> OTHER INFORMATION: *n at the 3' end of the primer represents a target-specific sequence of any length*  
353 <400> SEQUENCE: 15  
W--> 358 cccagctttc ttgtacaaag tggtn 25  
361 <210> SEQ ID NO: 16  
363 <211> LENGTH: 24  
365 <212> TYPE: DNA  
367 <213> ORGANISM: Artificial Sequence  
371 <220> FEATURE:  
373 <223> OTHER INFORMATION: attB2(-2) Oligonucleotide Primer  
375 <220> FEATURE:  
377 <221> NAME/KEY: misc\_feature  
379 <222> LOCATION: (24)..(24)  
381 <223> OTHER INFORMATION: *n at the 3' end of the primer represents a target-specific sequence of any length*  
382 <400> SEQUENCE: 16  
W--> 387 ccagctttct tgtacaaagt ggtn 24  
390 <210> SEQ ID NO: 17  
392 <211> LENGTH: 23  
394 <212> TYPE: DNA  
396 <213> ORGANISM: Artificial Sequence  
400 <220> FEATURE:  
402 <223> OTHER INFORMATION: attB2(-3) Oligonucleotide Primer  
404 <220> FEATURE:  
406 <221> NAME/KEY: misc\_feature  
408 <222> LOCATION: (23)..(23)  
410 <223> OTHER INFORMATION: *n at the 3' end of the primer represents a target-specific sequence of any length*  
411 <400> SEQUENCE: 17  
W--> 416 cagctttctt gtacaaagtg gtn 23  
419 <210> SEQ ID NO: 18  
421 <211> LENGTH: 22  
423 <212> TYPE: DNA  
425 <213> ORGANISM: Artificial Sequence  
429 <220> FEATURE:  
431 <223> OTHER INFORMATION: attB2(-4) Oligonucleotide Primer  
433 <220> FEATURE:  
435 <221> NAME/KEY: misc\_feature  
437 <222> LOCATION: (22)..(22)  
439 <223> OTHER INFORMATION: *n at the 3' end of the primer represents a target-specific sequence of any length*

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/517,466C

DATE: 04/24/2002

TIME: 07:44:39

Input Set : A:\09424680003seqlist ascii  
 Output Set: N:\CRF3\04242002\I517466C.raw

440 sequence of any length *same* 22

444 <400> SEQUENCE: 18

W--> 445 agctttcttg tacaaagtgg *tn* *same*

448 <210> SEQ ID NO: 19

450 <211> LENGTH: 26

452 <212> TYPE: DNA

454 <213> ORGANISM: Artificial Sequence

458 <220> FEATURE:

460 <223> OTHER INFORMATION: attB1- and attB2-derived Oligonucleotide Primer

462 <220> FEATURE:

464 <221> NAME/KEY: misc\_feature

466 <222> LOCATION: (26)..(26)

468 <223> OTHER INFORMATION: n at the 3' end of the primer represents a target-specific

469 sequence of any length

473 <400> SEQUENCE: 19 *same* 26

W--> 474 acaagtttgt acaaaaaagc aggctn *same*

477 <210> SEQ ID NO: 20

479 <211> LENGTH: 26

481 <212> TYPE: DNA

483 <213> ORGANISM: Artificial Sequence

487 <220> FEATURE:

489 <223> OTHER INFORMATION: attB1- and attB2-derived Oligonucleotide Primer

491 <220> FEATURE:

493 <221> NAME/KEY: misc\_feature

495 <222> LOCATION: (26)..(26)

497 <223> OTHER INFORMATION: n at the 3' end of the primer represents a target-specific

498 sequence of any length

502 <400> SEQUENCE: 20 *same* 26

W--> 503 accactttgt acaagaaagc tgggtt *same*

506 <210> SEQ ID NO: 21

508 <211> LENGTH: 19

510 <212> TYPE: DNA

512 <213> ORGANISM: Artificial Sequence

516 <220> FEATURE:

518 <223> OTHER INFORMATION: attB1- and attB2-derived Oligonucleotide Primer

520 <220> FEATURE:

522 <221> NAME/KEY: misc\_feature

524 <222> LOCATION: (19)..(19)

526 <223> OTHER INFORMATION: n at the 3' end of the primer represents a target-specific

527 sequence of any length

531 <400> SEQUENCE: 21 *same* 19

W--> 532 tgtacaaaaa agcaggctn *same*

535 <210> SEQ ID NO: 22

537 <211> LENGTH: 19

539 <212> TYPE: DNA

541 <213> ORGANISM: Artificial Sequence

545 <220> FEATURE:

547 <223> OTHER INFORMATION: attB1- and attB2-derived Oligonucleotide Primer

549 <220> FEATURE:

The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/517,466C

DATE: 04/24/2002  
TIME: 07:44:40

Input Set : A:\09424680003seqlist ascii  
Output Set: N:\CRF3\04242002\I517466C.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:15; N Pos. 25  
Seq#:16; N Pos. 24  
Seq#:17; N Pos. 23  
Seq#:18; N Pos. 22  
Seq#:19; N Pos. 26  
Seq#:20; N Pos. 26  
Seq#:21; N Pos. 19  
Seq#:22; N Pos. 19  
Seq#:23; N Pos. 16  
Seq#:24; N Pos. 16  
Seq#:25; N Pos. 13  
Seq#:26; N Pos. 13  
Seq#:27; N Pos. 12  
Seq#:28; N Pos. 12  
Seq#:29; N Pos. 11  
Seq#:30; N Pos. 11  
Seq#:33; N Pos. 4,5,6,7,8,9,10,11,12,22,23,24,25,26,27  
Seq#:92; N Pos. 7,8,10,11,12,14,15  
Seq#:109; N Pos. 20,21,22,23,24  
Seq#:110; N Pos. 25,26,27,28,29  
Seq#:112; N Pos. 20,21,22,23,24  
Seq#:113; N Pos. 25,26,27,28,29  
Seq#:114; N Pos. 13,14  
Seq#:115; N Pos. 13  
Seq#:132; N Pos. 6950  
Seq#:160; N Pos. 1326  
Seq#:162; N Pos. 1102,3080  
Seq#:171; N Pos. 1,2,3,4,5,6  
Seq#:172; N Pos. 1,2,3,4,5,6,7,8  
Seq#:173; N Pos. 1,2,3,4,5,6,7  
Seq#:179; N Pos. 2263  
Seq#:244; N Pos. 1  
Seq#:274; N Pos. 1  
Seq#:279; N Pos. 1